



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

P.O. Box 2063
Harrisburg, PA 17120



EAST MOUNT ZION (FETROW'S LANDFILL)
SUPERFUND SITE

Public Meeting
February 21, 1985

AGENDA

1. Opening Remarks Soni Dimond
2. Site Update Joe Kozlosky
3. Purpose of the Remedial Investigation
4. Questions/Answers
5. Closing Comments Soni Dimond

Please send comments on the Remedial Investigation by
March 8, 1985 to:

Soni Dimond
DER - Harrisburg Regional
Office
One Ararat Boulevard
Harrisburg, PA 17110

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EAST MOUNT ZION
SUPERFUND SITE
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

A Remedial Investigation and Feasibility Study (RI/FS) will be conducted at the East Mount Zion Site (Petrov's Landfill) in Springettsbury Township, York County. It will focus on the inactive dump which had received various municipal, industrial, and potentially hazardous wastes from the late 1940's until 1972. The Remedial Investigation will primarily involve hydrogeological studies, drilling of monitoring wells, sampling of nearby residential wells and springs, along with soil and surface water sampling. The goal of the RI will be to discover the nature and extent of contamination emanating from the East Mount Zion Site.

The RI/FS will be carried out in four (4) basic steps:

- I. Preliminary Activities
- II. The Remedial Investigation
- III. Analysis of the Remedial Investigation, and
- IV. Feasibility Study.

The Feasibility Study will be a separate report which will be based on the findings of the Remedial Investigation.

I. PRELIMINARY ACTIVITIES

- o Office planning, contractor selection, and preparation of a Site Operations Plan
- o Development of a Health and Safety Plan
- o Preparation of a Quality Assurance Plan for all sampling and analytical work
- o Site reconnaissance and review of known information about the site.

II. REMEDIAL INVESTIGATION

- o Aerial photo fracture trace analysis - Faint lines observed on aerial photos may be discerned by an expert to show areas where the underlying bedrock may be fractured (broken). Fractured

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bedrock zones are areas where groundwater flows more freely, relative to tight, unfractured rock. Since the directions of such fractures may control groundwater/contaminant movement from the site within the bedrock, this information can be used to help locate the monitoring wells around the site.

- o Air monitoring will be done at the site to safeguard workers and public health. Although air sampling by DER in the past has shown that no air hazard was found at Fetrow's Landfill, this will be done as a precautionary measure.
- o Conductivity Survey - Leachate contaminated groundwater usually has a high amount of dissolved compounds. The higher the amount of dissolved compounds in the groundwater, the easier it is for the groundwater to conduct electricity. By sending an electric current through the ground and down to the groundwater, we may be able to locate the contaminated groundwater plume at Fetrow's Landfill. Findings from the conductivity survey will help in deciding where to drill the monitoring wells.
- o Exploration well - The first well at the site will be drilled to extract a 2-inch diameter core approximately 200-feet long. A geologist will examine and describe this core. In particular, the geologist will look for any fractures through which contaminants could more easily flow. Any fractures found will aid in locating downgradient monitoring wells. This exploration well will later be used as a groundwater monitoring well.
- o Drilling and sampling of monitoring wells - Utilizing a phased approach, the information provided by the fracture trace analysis, the conductivity survey, and the exploration well will be used to determine siting of additional wells. Additional wells will be designed to encounter contaminated groundwater and will enable us to sample the groundwater

- as well as determine groundwater flow directions and rates.
- o Sampling of residential wells will be conducted to determine the water quality. All water samples will be analyzed for U.S. EPA priority pollutants.
 - o Surface water/leachate and sediment samples will be taken from the southeast and western slopes of the landfill. This sampling will also include any other places where leachate is evident.

III. ANALYSIS OF THE REMEDIAL INVESTIGATION

All of the information collected from the RI will be reviewed to define the situation as it relates to health hazards, environmental impacts, and the migration-potential of any discovered pollutants. The results of the RI will be written as a comprehensive report.

IV. FEASIBILITY STUDY

A Feasibility Study Report will be prepared for the East Mount Zion Site to evaluate various remedial alternatives to mitigate the problems at the site. The Feasibility Study will narrow down the choices and identify the final remedial alternatives. The final alternatives will be evaluated on the basis of environmental effectiveness, cost efficiency, and established engineering practices.

ORIGINAL
(red)Press Release
East Mt. Zion Site

The East Mt. Zion Site is a 10-acre landfill located in Springettsbury Township, York County, on a wooded ridge east of Mount Zion in Pennsylvania. The landfill is situated on top of a hill whose southern and western sideslopes average 70 to 80 percent. Both municipal and industrial wastes had been accepted at the site during the years between 1947 and 1972. The waste pile was not covered until after the landfill's final closure in 1972. The residents within a 1-mile radius of the site depend on groundwater for their water supply.

Testing by the state has shown the presence of several priority pollutants in the groundwater, including vinyl chloride and benzene. Trichloroethylene, phenol, and zinc were detected at significant levels in leachate samples collected by the state. Analysis of the electroplating sludge waste which was accepted by the landfill showed it to contain cyanide, chromium, cadmium, nickel, zinc, and copper.

Since 1938, the landfill property has been under private ownership. Charles H. Fetrow owned the property until 1972, at which time it was deeded to William E. Sacra, Jr. In 1982, the land was purchased by the current owner, the Schaad Detective Agency.

Past legal actions initiated by the state DER include:

Departmental Orders, Consent Decree, Petition for Contempt, Court Order, and Criminal Complaints.

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